



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/918,539 | 08/01/2001 | Hidekazu Nishigaki | 212031US2 | 3832 |

22850 7590 11/01/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

VO, CLIFF N

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,539

Applicant(s)

NISHIGAKI ET AL.

Examiner

CLIFF N. VO

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 14 and 20-27 is/are rejected.
- 7) ☒ Claim(s) 12 and 15-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The IDS paper filed April 5, 2004 and October 29, 2003 have been received and placed in the record of file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11, 13-14 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (U.S. Patent No. 6,430,993) in view of Shimizu et al (U.S. Patent No. 6,867,787).

As per independent claim 1, Seta teaches a method and system for supporting a user in mechanically analyzing a performance of an object (col.3, lines 54-62) comprising a step of graphically displaying on the screen a generalized model (Fig.6) which is constructed as a numerical analysis model for the object (col.41, line 65 through col.42, line 4) such that the generalized model has been generalized with respect to at least configuration of a configuration, a structure and a mechanism of the object, and has been specialized with respect to a function of the object (col.41, line 65 through col.42, line 21), a step of defining a specialized model which is constructed as a numerical analysis model for the object by specializing the displayed generalized model with respect to the at least one configuration (col.42, lines 1-4), and a step of

Art Unit: 2676

mechanically analyzing the performance of the object, on the basis of the specialized model defined by the data entered by the user, a numerical analysis approach predetermined in correspondence with the function of the object, and a numerical analysis condition determined by the user (col.44, line 62 through col.45, line 35).

It should be noticed that Seta fails to teach a step of graphically displaying on the screen an item for letting the user enter data using the input device. However, such a concept of graphically displaying on the screen an entry for allowing user to input data defining an object was commonly well known in the computer art at the time the invention was made. Shimizu et al teach another data processing system utilizing a graphical user interface including a step of displaying an entry field for allowing the user to input data defining an object being displayed on the display screen (Fig.3, i.e., right panel). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the concept of graphically displaying an entry field to the user for inputting data defining the displayed object into Seta system in order to make it more user friendly since it would have provided the easiness to the user in entering data into the system as now claimed.

As per dependent claim 2, Seta further teaches wherein the numerical analysis model has a plurality of features representing geometrical properties of the object in the form of a node having an attribute thereof and a discrete element having an attribute thereof (col.42, line 58 through col.43, line 10).

Art Unit: 2676

As per dependent claim 3, Seta further teaches a step of mechanically analyzing the performance of the object by directly using the defined specialized model (col.45, lines 29-35).

As per dependent claim 4, Seta further teaches the claimed features at col.42, lines 1-4.

As per dependent claim 5, Shimizu et al further teach a step of displaying on the screen in association with the displayed object, a figure for supporting the user in graphically entering data for the item (Fig.3).

Claim 6 is similar to claim 5, Seta further teaches wherein the item is used for letting the user enter the numerical data (col.42, lines 1-4).

As per dependent claim 7, Shimizu et al further teach the features as now claimed at Fig.3; col.6, lines 22-53.

As per dependent claim 8, Shimizu et al further teach a step of entering the data using the keyboard (col.6, lines 45-48).

As per dependent claims 9 and 11, Seta further teaches a step of graphically displaying on the screen the analysis results obtained from the numerical analysis model (col.29, lines 31-36).

As per claim 10, Shimizu et al further teach the features as now claimed at Fig.3.

Claim 13 is similar to claim 1, Seta further teaches a step of displaying the analysis results on a display screen at col.29, lines 31-36.

Claim 14 is similar to claim 1, Seta further teaches a step of converting a generalized model into the specialized model which serves as a numerical analysis model for the object at col.42, lines 22-41.

As per claim 20, Seta further teaches the features as now claimed at col.41, line 64 through col.42, line 4 and col.42, lines 22-64.

As per claim 21, Seta further teaches a step of storing as a template procedures in which the generalized model has been constructed by the user and, in response to a command, reading out the template to automatically reconstructing the same generalized model (col.36, lines 9-27, i.e., "a draft design set", template, is stored).

As per claims 22-24, Seta further teaches a computer readable storage which stores a computer program at col.29, lines 37-56.

Claims 25-27 recite a system for performing a method as claimed in claims 1 and 13-14, respectively, thus they are rejected under a similar rationale.

Allowable Subject Matter

4. Claims 12 and 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLIFF N. VO whose telephone number is 571-272-7651. The examiner can normally be reached on 2nd Monday Off.

Art Unit: 2676

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLIFF N VO
Examiner
Art Unit 2676



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600